# Memorandum

U.S. Department of Transportation

Federal Aviation Administration

Subject: <u>INFORMATION</u>: Policy Statement on Exit Bands Date: April 2, 2003

From: Manager, Transport Airplane Directorate, Aircraft Certification Service, ANM-100

Attn. of: ANM-03-115-04

Reply to

To: See Distribution Regulatory Reference: § 25.811(f), AC 20-47

#### **Summary**

The purpose of this memorandum is to provide Federal Aviation Administration (FAA) certification policy on colored exit bands required by § 25.811(f)(1) and (2).

#### **Current Regulatory and Advisory Material**

Section 25.811(f)(1) and (2) states the following:

- (f) Each emergency exit that is required to be openable from the outside, and its means of opening, must be marked on the outside of the airplane. In addition, the following apply:
- (1) The outside marking for each passenger emergency exit in the side of the fuselage must include a 2-inch colored band outlining the exit.
- (2) Each outside marking including the band, must have color contrast to be readily distinguishable from the surrounding fuselage surface. The contrast must be such that if the reflectance of the darker color is 15 percent or less, the reflectance of the lighter color must be at least 45 percent. "Reflectance" is the ratio of the luminous flux reflected by a body to the luminous flux it receives. When the reflectance of the darker color is greater than 15 percent, at least a 30-percent difference between its reflectance and the reflectance of the lighter color must be provided.

Advisory Circular 20-47, dated February 8, 1966, states the following:

Questions have been raised as to whether the colored band must be on the fuselage structure surrounding the opening or whether it can be on the exit adjacent to the edge. A two-inch colored band outlining the exit is considered to comply with applicable regulations whether the band is on the edge of the exit itself, on the fuselage surrounding the exit, or partially on both.

### **Policy**

The FAA has been asked if compliance with § 25.811(f)(1) and (2) can be found with the lower section of a 2-inch colored band located a few inches above the base of an exit. Metal door sills are often installed on the fuselage below floor-level exits to provide protection from impacts with loading equipment. If the band is located on the bottom edge of an exit, its color must be compared with the door sill color to determine compliance with § 25.811(f)(2). This requirement can result in a color scheme which is not desired by the operator. Note that painting the door sill is not considered a viable option since impacts with loading equipment cause the paint to scratch and wear away quickly. If the band is located a few inches above the base of the exit, its color is compared with the door color below the band instead of the metal door sill. This results in more color options for operators to choose from in determining a desired color scheme.

The purpose of these bands is to assist rescue personnel in recognizing exits in the side of the fuselage. Section 25.811(f)(1) requires that a 2-inch color band outline each passenger emergency exit in the side of the fuselage. Advisory Circular 20-47, paragraph 4b, indicates that a color band outlining an exit is considered to comply with applicable regulations whether the band is on the edge of the exit itself, on the fuselage surrounding the exit, or partially on both. Although this guidance indicates acceptance of bands located on the edge of the exit itself, the FAA considers that a band could be located a small distance away from the exit's edge and still be considered to "outline" the exit as required by § 25.811(f)(1). The FAA finds that for floor-level exits the size of a Type II exit or larger, compliance can be found with the top and side sections of a band located a maximum of 2 inches away from the exit's edge and the bottom section of a band located between 2 inches below and 3 inches above the exit's edge. Attachment 1 is a figure that demonstrates these boundaries. The bottom section of the band is allowed to be farther away from the exit's edge than the other sides of the band to be consistent with past practices for exits with a door sill installed at their base. Although the band is not required to be on the edge of the exit, it must be parallel to the exit's edge.

### **Effect of Policy**

The general policy stated in this document does not constitute a new regulation or create what the courts refer to as a "binding norm." The office that implements policy should follow this policy when applicable to the specific project. Whenever an applicant's proposed method of compliance is outside this established policy, it must be coordinated with the policy issuing office, e.g., through the issue paper process or equivalent.

Applicants should expect that the certificating officials will consider this information when making findings of compliance relevant to new certificate actions. Also, as with all advisory material, this policy statement identifies one means, but not the only means, of compliance.

/s/ Ali Bahrami for

Vi L. Lipski

## Attachment 1 Acceptable Color Band Locations for an Exit the Size of a Type II Exit or Larger

